in Shec'oputifio o

TO-1390 (Rev. 12-2004) Approved for use through 3/31/2007, OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

### TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371

ATTTORNEY'S DOCKET NUMBER

P2003J077-WO **CFR 1.5)** INTERNATIONAL APPLICATION NO. PRIORITY DATE CLAIMED INTERNATIONAL FILING DATE 29 October 2004 (29.10.2004) PCT/US2004/036109 05 November 2003 (05.11.2003) TITLE OF INVENTION FCC FEED INJECTION ZONE APPLICANT(S) FOR DO/EO/US Dean C. Draemel, Todd R. Steffens Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items 3. (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). 5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. c. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). 7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). 10. Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 12. 13. **X** A preliminary amendment. 14. X An Application Data Sheet under 37 CFR 1.76. A substitute specification. A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825. 17. A second copy of the published International Application under 35 U.S.C. 154(d)(4).

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the Inis collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or information is required to USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the complete form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Page 1 of 2

A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

19. L

20. 📖

Other items or information:

# IAP15 Rec'd PCT/PTO 04 APR 2006

PTO-1390 (Rev. 12-2004)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)			INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER		
10/574796 PCT/US2004/036109					P2003J077-W	0	
B	ng fees are submitted:				\$ 300.00		
a) Basic national fee			\$300.00		000.00		
b) Examination fee\$200.00					\$ 200.00	<del></del>	
<b>X</b> c) Search fee\$500.00					\$ 500.00		
	TOTAL OF ABOVE CAL	\$ 1,000.00	)				
listing or co	ee for specification and d mputer program listing file 0 sheets of paper or fract						
Total Sheets	Extra sheets		of each additional 50 or fraction (round up to a whole number)				
31 -100=	/50 =		0	x \$250.00	\$ 0.00		
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).					\$ 130.00		
CLAIMS	NUMBER FIL	.ED	NUMBER EXTRA	RATE	\$		
Total claims	10	- 20 =	0	x \$50.00	\$ 0.00		
Independent clai	ims 1	- 3 =	0	x \$200.00	\$ 0.00		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360.00	\$ 0.00			
TOTAL OF ABOVE CALCULATIONS =						)	
Applicant c	claims small entity status.	\$ 0.00	)				
		\$ 1,130.00	\$ 1,130.00				
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).							
		\$ 1,130.00					
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property \$ 0.00							
TOTAL FEES ENCLOSED = \$ 1,13						0	
					Amount to be refunded:	\$	
					Amount to be charged:	\$ 1,130.00	
						•	
			to cover the above				
b. Please charge my Deposit Account No. 05-1330 In the amount of \$ 1,130.00 to cover the above fees.  A duplicate copy of this sheet is enclosed.							
c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>05-1330</u> . A duplicate copy of this sheet is enclosed.							
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card Information should not be Included on this form. Provide credit card information and authorization on PTO-2038.							
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.							
SEND ALL CORRESPONDENCE TO:  EXXONMOBIL RESEARCH AND ENGINEERING COMPANY  Sund . The							
1545 Route 22 East, P. O. Box 900 SIGNATURE							
Annandale, New Jersey 08801-0900  United States of America  Gerard J. Hughes							
TO THE							
				41,855	TION NUMBER		
				REGISTRA	TION NUMBER		

## IAP:5 Fice'd PCT/PTO 04 APR 2006 **PATENT**

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PCT Application No.: PCT/US2004/036109

§ PCT Operation:

Applicant: Dean C. Draemel, et al.

U.S. National Phase

International Filing Date: 29 October 2004

Agent's Reference No.:

P2003J077

Earliest Priority Date: 05 November 2003

gnature of person mailing correspondence

Title of Invention: FCC FEED INJECTION ZONE

 $\omega \omega \omega \omega \omega \omega \omega \omega$ 

**Mail Stop PCT Commissioner for Patents** P. O. Box 1450 Alexandria, VA 22313-1450

### **VERIFICATION OF EXPRESS MAIL UNDER 37 CFR 1.10**

EV 662834765 US	04 April 2006
Express Mail mailing number	Date of Deposit

I hereby certify that the attached correspondence, consisting of a Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. 371 (2 pages), an Application Data Sheet (3 pages), and a Preliminary Amendment (3 pages), is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Mail Stop PCT, P. O. Box 1450, Alexandria, VA, 22313-1450.

Regina Tucker-Mattox

Typed/printed name of person mailing correspondence